## INTERNATIONAL SEARCH REPORT

International application No. PCT/US99/09256

| A. CLASSIFICATION OF SUBJECT MATTER  IPC(6): C12N 1/21,1/15, 1/19, 5/10, 9/24, 15/09, 15/56, 15/63  US CL: Please See Extra Sheet.                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| Minimum documentation searched (classification system followed by classification symbols)                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| U.S. : 435/252.3, 325, 252.33, 248, 254.2, 254.21, 254.23, 200, 226, 320.1; 536/23.2; 530/387.9                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  APS, MEDLINE, SCISEARCH, LIFESCI, EMBASE, BIOTECHDS, CAPLUS, NTIS, BIOSIS, JAPIO, PATOSEP, PATOSWO terms: heparanase#, gene# or sequence#                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| Category*                                                                                                                                                                                                                                                                                                                                                                                                                 | Citation of document, with indication, where ap                                                                                                                                                     | propriate, of the relevant passages                                                                                                                                                                                                              | Relevant to claim No.                                                                                                                           |
| X,P<br><br>Y,P                                                                                                                                                                                                                                                                                                                                                                                                            | WO 99/11798 A1 (INSIGHT STRATEGY & MARKETING LTD.)  11 March 1999, see entire document                                                                                                              |                                                                                                                                                                                                                                                  | 1-4, 7-11, 15, 17, 20-22, 25-29, 33, 35, 42-45, 48, 49, 56-60, 62  5, 6, 12-14, 16, 18, 19, 23, 24, 30-32, 34, 36-41, 46, 47, 50-55, 61, 63, 64 |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                         | WO 95/04158 Al (THE UPJOHN of entire document.                                                                                                                                                      | CO.) 09 February 1995, see                                                                                                                                                                                                                       | 1, 4-20, 23-49, 62-64                                                                                                                           |
| Further documents are listed in the continuation of Box C. See patent family annex.                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| * Special categories of cited documents T* later document published after the international filing date or priorit date and not in conflict with the application but cited to understan to be of particular relevance.  *T* later document published after the international filing date or priorit date and not in conflict with the application but cited to understan the principle or theory underlying the invention |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                  | scation but cited to understand                                                                                                                 |
| "E" ca<br>"L" do<br>cit                                                                                                                                                                                                                                                                                                                                                                                                   | document published on or after the international filing date  document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other |                                                                                                                                                                                                                                                  | red to involve an inventive step                                                                                                                |
| special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                     | "Y" document of particular relevance; the claimed invention eannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |                                                                                                                                                 |
| *P* document published prior to the international filing date but later than the priority date claimed                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                     | *& * document member of the same patent family                                                                                                                                                                                                   |                                                                                                                                                 |
| Date of the actual completion of the international search                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                     | Date of mailing of the international search report                                                                                                                                                                                               |                                                                                                                                                 |
| 29 JULY 1999                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                     | 24 AUG 1999                                                                                                                                                                                                                                      |                                                                                                                                                 |
| Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                     | REBECCA PROUTY  Telephone No. (703) 308-0196                                                                                                                                                                                                     |                                                                                                                                                 |